

## PRIVATE STAMPS OF DIFFERENT COUNTRIES.

How International Franking is Done.



In civilized countries to-day government documents are sent free through the mails and bear stamps showing that such a privilege has been accorded to them. On each of these stamps appears the name of the country or city where it is issued, the number of the document and the letter R, which is the initial of the French word "Recommandee," and which indicates that the document is franked, or, in other words, is exempt from the usual postal charges. The stamps are issued in the following countries: Russia, Italy, Finland, Japan, Roumania, Mexico, Spain, Portugal, Belgium, Greece, Chile, Sweden, Ecuador, Germany, Austria, United States of America, Colombia, Holland, Hungary, Persia, Great Britain, Switzerland, Montenegro, Costa Rica, France and Uruguay. As graphologists maintain that the character of every human being is revealed in his or her handwriting, so it is claimed that national character is in each case revealed in these stamps, and especially in the manner in which the capital R is formed. That the formation of this letter is not the same on all the stamps can be seen at a glance. On some it is strictly regular, while on others it is more or less artistic, as the graceful curve of its tail shows.—New York Herald.

## History of a Thunder Storm

With a Diagram Which Simplifies the Explanation.

In a pamphlet by Alfred F. Sims, prepared for and circulated by the General Electric Company, there is given some interesting data about the history of a thunderstorm, from which the following is taken:

The attendant phenomena of a thunderstorm vary considerably, but are usually as follows: First, cirrus haze appears in the morning. Then dark clouds are seen lying low in the western sky, usually in the afternoon; the air is warm and sultry. Later on the clouds mount to near the zenith, and the air near the ground "a solemn stillness holds." The clouds on the front of the thunderstorm are grayish white or reddish and hang over and in front of the main rain cloud. Above these dense dark gray and violet cumulo-stratus clouds are seen, also the towering cumulus clouds which are separated from the cumulo-stratus. Often these are interspersed with one or more thick cumulo-stratus cloud layers and above all is the widely distributed cirro-stratus.

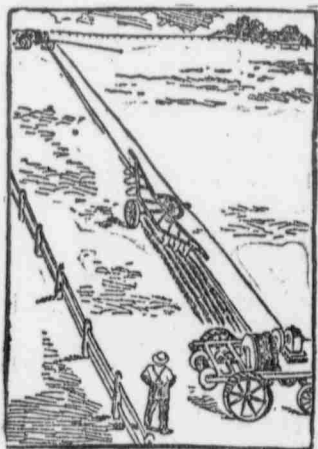
The herald of the storm is heard before the cloud reaches the zenith, and the first rain commences after it. The interval between the first thunder and the beginning of the rain varies from a few minutes to half an hour or more. About five minutes before the rain begins there comes from the west or northwest a brisk wind which suddenly increases in violence and becomes a squall.

The time of heaviest rainfall varies; sometimes it occurs at the beginning and sometimes in the latter part of the time the rain cloud draws over a locality. The lightning strokes and loudest thunder occur some minutes after the rain begins. Gradually the western horizon loses its dark aspect, lightens up a little, and finally opening clouds appear. The storm clouds pass by overhead and the rain ceases shortly before their western edge reaches the zenith. The last thunder is usually heard after the rear edge of the cloud has passed to the zenith. The usual direction of translation of thunderstorms in this latitude is easterly, and they revolve around a horizontal

humidity increase very rapidly and the temperature falls; the wind suddenly subsides almost immediately afterward, while at times it increases until near the close of the thunderstorm. Toward the end of the thunderstorm the air pressure and the relative humidity reach their maximum and the temperature its minimum.

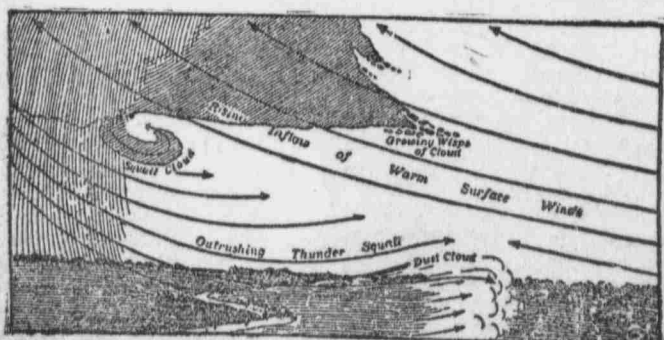
### For Western Farmers.

The up-to-date farmer with a large acreage finds it slow work to plow his fields with the old single plows of the past, and so he utilizes the electric current and multiplies the number of plow shares to suit himself. In the West this is practically a necessity, on account of the large size of the fields and the cost of labor and teams. Our illustration shows a



ELECTRICALLY-OPERATED PLOW.

convenient form of motor plow which has been designed by Conrad Melssner, of Friedrichsburg, Germany. It consists of two electric motors operating winding drums on separate carriages, which may be placed at any required distance apart, only one motor being connected with the main feed wire. To supply power to the second motor a feed cable lying parallel with the traction cable is readjusted at every trip of the plow to follow the latter down the field. The mechanism is so adjusted that when once set in motion the apparatus practically operates itself, moving the carriages forward at the beginning of each trip to bring the plow-shares in position for the next row of furrows. The



DIAGRAMMATIC SECTION OF A THUNDERSTORM.

axis, whereas tornadoes revolve around a vertical axis.

Before the thunderstorm the meteorological conditions undergo the following changes: The air pressure and the relative humidity decrease, and the temperature rises; the wind is light. At the moment of bursting of the storm the air pressure and relative

plows are attached to a two-wheeled truck, which is pulled back and forth across the field, moving forward at the end of each set of furrows as long as the power is turned on.

The Rhine is only 960 miles long, but drains a territory nearly double the area of Texas.

## HORTICULTURE



### Success With Sweet Peas.

The secret of success with sweet peas is early and deep planting. As soon as all the frost is out of the ground spade fifteen or eighteen inches deep, make the soil fine and mellow, enrich with well decayed cow manure with a slight admixture of woodashes. Make two rows or trenches running north and south with a liberal supply of green fertilizer at the bottom of the trenches, if convenient, and cover lightly with dirt. Soak the seed several hours in warm water, and plant six or even eight inches deep, and one inch apart. It is best to make the trellis or supports at the time of planting that the vines may not be disturbed later on. When five or six inches high give a heavy mulch. If well mulched less watering is necessary during the dry season.

### Growing Forest Trees.

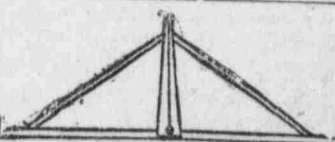
Those who desire to grow forest trees of any kind for shade or ornamental trees should remember that there is no better time to gather the seed than when it ripens upon the tree, and no better time for sowing it than that when it would be self sown by falling from the tree. That is, if the tree is a native of the place where it is to be grown. If from a warmer climate it may be necessary to start the seed under glass, and protect it in some way during a few of the first winters while it is small. At the Arnold Arboretum by this method they have acclimated and grown in this way some trees and shrubs that are not native here, and seldom found north of Mason and Dixon's line. The seeds from these plants are more hardy than those from Southern plants and thus they can be made to endure our colder northern climate, and the northern limit of their growth is gradually being extended.—American Cultivator.

### Plants Need a Soaking.

If it becomes necessary to water the plants in the vegetable or flower garden, or seems desirable to do so, remember that what they will receive the best results from is not just a sprinkle, that will lay the dust and moisten the surface of the soil so that it may bake up hard and dry, and be worse than before, because it cannot absorb moisture from the atmosphere during the night, but they need a soaking of the ground that will wet down to the lower roots, and even tempt them to strike down deep after more moisture and more fertility. We never found better results from water than when we put a tile drain down about two feet in a raised mound in the flower bed and turned our water into that. While before it had been the first place to dry up in summer, after that was done the plants always grow luxuriantly. It was an example of sub-irrigation. While we were doing this we could see other gardens where the sprinkler ran for hours every day, seldom wetting an inch below the surface, and the plants dying or failing to produce, because the soil never got well saturated with moisture. When a rainy day came the surface was usually so baked up that it soaked up no more water than would penetrate the shell of a turtle. When the garden is to be irrigated give water enough to cover the surface about an inch deep, allow it to soak in, and when the surface is dry stir it enough to give a dust mulch all over it.

### Drainage Made Easy.

One of the greatest drawbacks to successful farming operations on thousands of farms in Western New York is the absence of a thorough system of tile drainage, consequently the early preparation of ground, and the planting of crops, is not only greatly retarded, but the season for growth being also comparatively less, makes



A PLUMB-LINE DRAINAGE LEVEL.

them more susceptible to early autumn frosts before maturity. Drain lowest depressions first, and continue the work as circumstances permit and never attempt to do a perfect job without the constant use of the level whenever any doubt exists as to the required grade of the ditch. The accompanying illustration shows a very simple, accurate and practical level, working on the principle of a plumb-line. It is sixteen and a quarter feet long, so that by raising either end one inch and marking the variation in the plumb one can easily tell when the grade is one inch to the rod. This level can be slid along in the bottom of the ditch, thus keeping a uniform grade of any desired fall.—Irving D. Cook, Genesee County, New York, in the American Agriculturist.

Silence and Express.

## FARM TOPICS

### Producing Lean Meat on Hogs.

The production of lean meat on hogs is not necessarily a loss of weight. To secure lean meat the animals are fed on a variety, which consists largely of nitrogenous food, which promotes increase in growth and weight, the variety enabling the hogs to consume more food, which increases the production of meat.

### The Clover Hay Worm.

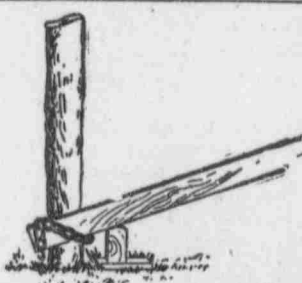
It is reported that the clover hay worm, which has never been very troublesome in the Eastern States so far as we have learned, is proving a decided pest in some of the Western States, where alfalfa is a principal crop. Those who buy Western clover or alfalfa should take care that they do not take this work home with them, or if a few are found should shake them out of the hay, sweep them up and burn them. It is not the amount of the hay that they eat which causes the loss, but the fact that they foul the hay with their excrements until cattle reject it unless starving, and even when eaten it is unwholesome for them or for their milk. Looking mouldy and as if full of spider webs or long threads, every lock in which it is seen should also be burned.

### Running Farm Machinery.

No man can be considered an expert in running farm machinery unless he attends to certain points in managing the machines. First, keep every joint and bearing well oiled. Next see that all parts which are liable to collect dust are brushed clean at least every time the team is unhitched, and see then that every nut and bolt is in place and holding the parts snugly. Not only that, but if a rattle is heard when at work, investigate at once and stop it, even if it is necessary to unhitch the team to make it safe to work on it. Keep all cutting parts clean and sharp, and see that the draft is just right to be as easy as is possible for both team and machine. The man who does all this will accomplish good work and not injure team or machine.

### Pulling Up Old Posts.

Old fence posts have to be taken up occasionally, and the easiest way to do it is shown in the cut. Use a lever sufficiently long so that lots of power can be exerted. If the post is smooth



or slippery, so that the chain slips, drive a staple over the side of one of the links on the under side, driving it in just far enough to hold the chain to the wood.

The same device is often of service in taking up small trees in the fall or spring. Dig around the tree, getting loose all the long roots possible. Then work a chain under and around the ball of earth that holds the fibrous roots below the trunk, and, setting a long, stout lever, gently lift the tree and earth out of the ground.—New York Tribune.

### A New Idea in the Pig Business.

You have all heard of people hatching chicks by means of incubators and selling them to people who wanted to raise poultry and of those who have calves and sell them to feeders who in turn prepare them for the block. Well here is a new idea along this line which I have never before heard of. It is the business of raising pigs to sell to farmers who want to grow pork.

About a year ago the editor of the Seneca, Missouri Dispatch having a couple of blocks of ground entirely remote from the residence portion of the town, began as a side line the industry of raising pigs and selling them to feeders. The record of one animal out of several will suffice to show possible results. It must be taken into consideration that this experiment has been carried out on a limited area of ground, and that all feed required for the brood stock was purchased at market rates and pasturage of only a limited amount was available. Within the year one brood sow has brought and raised to a marketable age two litters, respectively nine and eight head of young porkers, which when sold at an average of about three months brought \$47. The total cost of keeping the dam, also the young porkers, until disposed of, on a very liberal estimate, has not exceeded \$22, showing (not including labor of caring for them) a net profit of \$25 upon the operation.

A herd of twenty or twenty-five good brood sows, properly cared for, should yield a very respectable income for the time of one man devoted to the business. Yet many farmers give little or no attention to this industry.

## HOUSEHOLD AFFAIRS



### Tansy Leaves For Moths.

An old-fashioned country recipe that a village housewife recommends to drive out moths, is tansy leaves. These sprinkled freely about your room and furs prove efficient.—New Evening Post.

### To Prevent Brass Tarnishing.

To half a pint of methylated alcohol add half an ounce of shellac. Stand a few days in a tightly corked bottle and give it a shake occasionally. Then pour off the clear liquid and use it to paint lightly over your brass cleaning. It evaporates quickly so must be kept well covered. If possible, the brass should be polished when it is applied.

### How to Raise Ferns.

With the exception of the maidenhair, which requires a heavier loam, the soil in which ferns are placed should be a mixture of half sand; one-quarter fibrous one-half broken mature sod and quarter to one-sixth of leaf mold. May have difficulty in finding but sandstone or micaceous which may be found almost anywhere will tend to keep the soil open. Ways place a large piece of broken curved side up, over the hole in bottom of the pot to allow drainage. Over this put broken bits about inch deep and fill in with prepared soil. The ordinary flower pot is for this purpose, but a wide, flat better, as it allows more room for roots and creeping stems.

### Devices For Cooling the Air.

"There are several devices that can be used to cool the air during the hot days," writes Maria Parloa, in Ladies' Home Journal. "A most effective of the tattle employed in this for this purpose could be made in a country house. On frames like those used for window screens tack narrow tapes to make a support for thick bed of grass. Now cover long grass fastened to the frame with sewing with twine. These screens should be placed in the windows kept wet. The air passing through them is cooled. A garden syringe can be used to spray them with water. Three or four of these screens will make a great deal toward keeping the air in the house cool and fresh. A simpler screen may be made by covering a frame with coarse flannel, which should be kept wet. It is not so effective as the grass screen, and flannel dries more quickly than grass. A still simpler device is to have wet flannel over the ordinary screen, wetting the flannel from time to time. Some of the moisture can be removed from the atmosphere by placing large lumps of quicklime in earthen bowls about the rooms."

## HOUSEHOLD RECIPES

**Whipped Cream Sauce**—Whip a cupful of cream until stiff; add one-half cupful of powdered sugar and white of an egg beaten stiff; one spoonful of vanilla, one teaspoonful almond extract, or any cordial.

**Chocolate Sauce**—One-half cup sugar, one cup of water, one-inch stick of cinnamon. Boil five minutes, strain and add four tablespoonfuls of chocolate dissolved in one-half cup of milk. One tablespoonful of arrowroot dissolved in one-fourth cup of cold water pinch of salt. Boil five minutes. Add one teaspoonful of vanilla and serve.

**Russian Soup**—Wash a "handful" each of sorrel, fennel and young leaves, put in a saucepan, cover with water, add a saltspoonful of salt and boil half an hour. Strain and add a pint of stock and half pint of cream. Season with another saltspoonful of salt, dash of cayenne, tablespoonful of minced parsley and chives. Set on ice until cold. When ready to serve add hard-boiled eggs sliced.

**Piquette**—This is a very pleasant summer beverage; can be made in quantity, bottled, and will keep several hours before serving. Five pounds each of raisins and dried apples and five gallons of water. Place in open cask and let stand for three days. Bottle with half a teaspoonful sugar and a bit of cinnamon or cloves in each bottle. Vary the flavor to the taste.

**Farina Puffs Baked**—Put two cups of milk over the fire. When hot add six tablespoonfuls of farina and cook until thick. Add egg yolks, one-half cup of sugar, and a pinch of salt. Cook longer, fold in the stiffly beaten eggs beaten stiff with a bit of vanilla. Fill small tarts and bake ten minutes. Turn out from the shell and drizzle with chocolate sauce.